

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 165758***165758***

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Monday, August 28, 2017 10:53:13 AM

Item ID: D4811-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Pin, Quick Release
Start Date: 8/28/2017 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 9/1/2017 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- All purchased or subcontracted products	0.00							
120									
QC	Memo	0.00							
Quality Control									
130	Identify as per dwg & Stock Location: SCA	0.00							
130									
Packaging	Memo	0.10							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	1.00							
Quality Control									

10 17-08-05 10

10 SEP 06 2017 DAS 6 9-89

17/9/11 17/9/11 SEP 06 2017

DQA: _____ Date: _____



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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Page 1

Monday, August 28, 2017 10:53:12 AM

Work Order ID: 165758

165758

Parent Item: D4811-1

D4811-1

Parent Item Name: Pin, Quick Release

Start Date: 8/28/2017

Required Date: 9/1/2017

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 13.05.21 AS PER DWG REV.A VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
98470A133		Purchased	No			110	Each	0.0000	1	10			
98470A133									**				
Pin, Quick Release													

10 x 2017-9-5

DQA: _____ Date: _____



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Work Order update only ☐

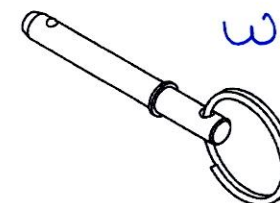
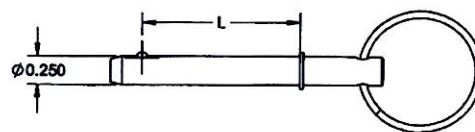
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

SPECIFICATION CONTROL DRAWING

DAS
13
9-89

AUG 28 2017

W10:165758



DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	L	MATERIAL
D4811-1	QUICK RELEASE PIN	MCMaster CARR	98470A133	1.347	18-8 SS

RELEASED
2013-05-16

NOTES:

- 1) MATERIAL: PER TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 METHOD 6.7
- 7) WEIGHT: N/A

A	NEW ISSUE	DB	13.04.01
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A.P.	DRAWING NO.	REV. A
MFG. APPR.	W	D4811	SHEET 1 OF 1
DE APPR.	W	TITLE	SCALE
DATE	13.04.01	QUICK RELEASE PIN	NTS
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THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37600**

Purchase Order Date 8/29/2017

PO Print Date 8/30/2017

Page Number 1 of 7

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

AUG 30 2017

Contact Name

Vendor Phone

330 995 5500

Ship To Contact

Ship To Phone

Ship Via:

Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	MC1095S.020	C1095 Blue Tempered Spring Steel Sheet .020 mcmaster p/n: 9036K499	9/1/2017 Yes 9/1/2017		12.00 sf	\$7.61	\$91.29
Line Total:							\$91.29
2	98470A133 As per Dwg D4811 Rev.A B165758	Pin, Quick Release	9/1/2017 Yes 9/1/2017		10.00 Each	\$3.01	\$30.10
Line Total:							\$30.10
3	59915K274 As per Dwg D4777 Rev. A B165757	Rod End Bearing	9/1/2017 Yes 9/1/2017		10.00 Each	\$19.05	\$190.50

Note:

8/30/2017



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
le.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO37600

Order Placed By
Chantal Lavoie

McMaster-Carr Number
7980430-02

Page 1 of 2

08/30/2017

Line	Product	Ordered	Shipped
1	9036K499 Wear-Resistant 1095 Spring Steel, 0.0200" Thick, 6" Wide, 20 Feet Long	1 Each	1
2	98470A133 Shoulder-Style Ring-Grip Quick-Release Pin, 18-8 Stainless Steel, 1/4" Diameter, 1-5/16" Usable Length	10 Each	10
3	59915K274 Corrosion-Resistant Ball Joint Rod End, 3/8"-24 Thread, Right Hand	10 Each	10
4	6937T8 Glazing Sealant, Sika 295, 10.1 oz., Black	1 Each	1
5	6306K49 Plastic Tapered Handle with Revolving Grip, M8 x 1.25mm Threaded Stud, 65mm Long	1 Each	1
6	6308K44 Plastic Tapered Handle with Revolving Grip, 3/8"-16 Threaded Stud, 3-1/8" Long	1 Each	1
7	4125A186 Band Saw Blade for Straight Cuts, 1/2" Wide x 0.025" Thick, 140" Long, 14 Teeth Per Inch	4 Each	4
8	46325A93 Backup Pad for 3" Quick-Change Sanding Disc	8 Each	8
9	5853A15 Ball Peen Hammer with Steel Handle, 8 oz.	2 Each	2
10	4689A26 Pedestal with Tool Tray and Water Pot	2 Each	2
11	4689A14 Light Duty Bench Grinder for 8" Wheel Diameter	1 Each	1
12	5557K33 Teflon FEP Semi-Clear Tubing for Chemicals, Flexible, 4 mm ID, 6 mm OD, 10 Feet Long	10 Feet	10
13	4880K26 Standard-Wall PVC Pipe Fitting for Water, 90 Degree Elbow Connector, White, 2 Socket-Connect Female	1 Each	1
14	6641A41 Flexible Gasket Maker Sealant, Loctite 598, 2.36 oz. Tube	15 Each	15
15	8739K72 White Delrin® Acetal Resin Oversized Bar, 1-3/4" Thick, 1" Wide	3 Feet	3

Shipped separately from our Atlanta warehouse on 08/30

7	6603A52 Lock-Open/Lock-Closed Drawer Slides, 30" Closed Length	8 Pairs	8
17	8497K691 Acetal Rod, White, 10" Diameter, 1 Foot Long	2 Feet	2

Packing List

200 Aurora Industrial Pkwy
Aurora OH 44202-8037
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO37600

Page 2 of 2

08/30/2017

Order Placed By
Chantal Lavoie

McMaster-Carr Number
7980430-02

SP17-9-5

Certificate of compliance

This is to certify that the above items were supplied in accordance with the description and as illustrated in the catalog. Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Sarah Weinberg

Sarah Weinberg
Compliance Manager